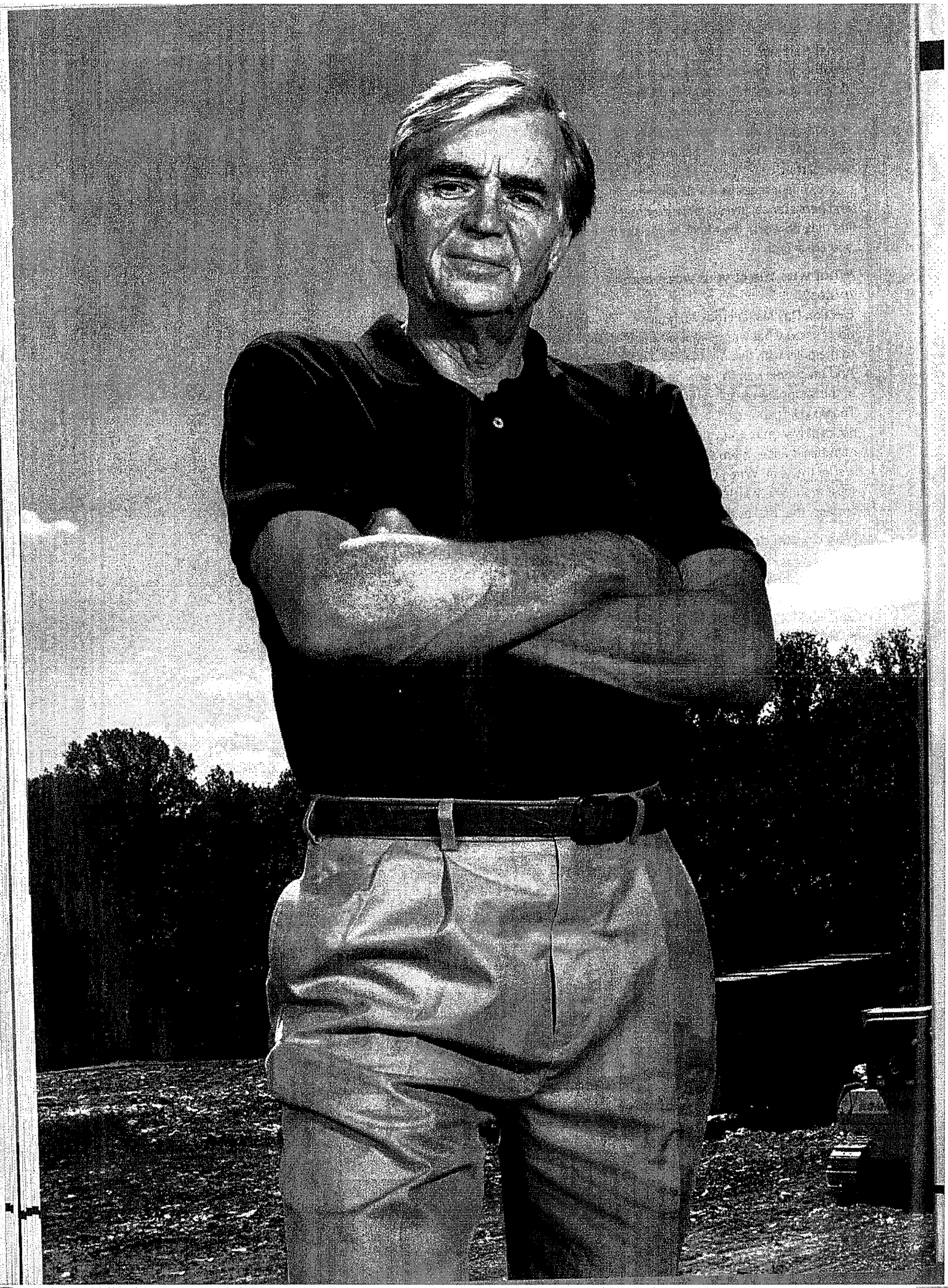

By Forrest Glenn Spencer Photography by Jonathan Timmes

Going for the Green

Warrenton Mayor George B. Fitch turns his sights from Olympic gold medals to gold standards in renewable energy for his town.

George B. Fitch has always been an innovative and resourceful man. In his career he has served both in the public and private sectors. He spent 11 years in the U.S. Foreign Service, focusing on trade issues, then served as a commercial trade attaché to Jamaica and France. In 1987, he founded the famous Jamaican bobsled team that made their debut in the 1988 Olympics in Calgary. In the mid-1990s, Fitch and his wife, Patricia, moved to Warrenton. In 1998, he became mayor of the Northern Virginia farming community, a township of 8,000 in Fauquier County. Fitch, a Republican, continued working as an international trade consultant while managing several initiatives for the citizens of Warrenton, including improving community services, reducing taxes and building a multi-million dollar recreational center.

He thought these efforts would be his swan songs as a public official (he plans to retire as mayor when his term expires). But in 2006, Fitch began researching and developing the potential benefits of a biomass energy plant and fuel facility serving Warrenton, one he believes has the ability to power every business and home there and, in time, produce ethanol gasoline. The source of biomass would be the tons of trash that is bound to the county's landfill daily. If Fitch succeeds with this endeavor, Warrenton will be the first Virginia community able to provide power for its people locally rather than relying on imported energy and fossil fuels, thereby cutting greenhouse emissions and protecting the overall environment, especially the rich farmland and the vital water supply.

The plan has both its supporters and its skeptics; some are sitting on the fence, waiting to see how Fitch's initiative will unfold and whether the combination of current technology and a public-private sector partnership can make one Northern Virginia community self-sufficiently green in terms of power generation and fuel production. Fitch believes strongly that this project is technologically feasible, economically practical and potentially profitable.

What is the goal of this initiative?
The goal is local energy independence for communities like Warrenton who should take advantage of all the waste and residues in their backyards, primarily their landfills, and turn a liability into an asset, because given today's evolving technology you can make electricity and fuel. We've calculated that the amount of trash—both MSW (Municipal Solid Waste) and CDW (Construction Demolition Waste)—that goes into our county landfill every year. If that's not buried into a hole, but instead diverted to a biomass plant, it would provide enough surplus electricity and surplus the internal needs to the plant. We want to try and power everything with renewable [resources]. Even igniting the plant will be done with a renewable—it'll be from the methane gas captured in the landfill, and it'll be piped into the plant so we can claim that not a single ounce of fossil fuel was used, which I don't think any other biofuels or bioenergy plant

can claim. So there would be enough surplus energy to power every single building and house in Warrenton. The technology, hopefully, [will work so] that we can also make fuel like ethanol—that'd be eight to 10 million gallons. That would be an E-15 blend—that's 15 percent ethanol, 85 percent gasoline—to give you enough to make it available for every vehicle in Fauquier County.

What is the cost for such a plant?
Who knows the cost? It could be $30 to $60 million, but we're not paying for it. My view is that government is here to assist, not to compete. What we're basically doing here is teeing it up for the private sector by showing the private sector that local government is willing to cooperate. Part of the business model is that it has to be a public-private partnership. You have to have local governments here to help, not to hinder. And the private sector steps in and they finance, build and operate.

Are you engaged with a feasibility study?
The feasibility study is being done by the leading consultant company on biomass and the Pacific Northwest National Lab of Washington state, which is [Department of Energy-funded] and the leading lab on biomass technology. They're basically going to recommend, based upon our situation, given what we want to accomplish, what is the best technology to use.

Once the study is done, the next thing we do is try and bring the county on board, which we should because it's their landfill. Then the town and county form the public side of the partnership, and we create an authority. Next, we reach out to private companies. We've already had a half dozen unsolicited knocks on our door saying they want to do this. We have to decide which private companies will be interested as strategic partners for this kind of project, and then we go in and apply for a grant or loan guarantee from the federal government, mainly DOE or USDA, to commercially demonstrate the conversion technology for this kind of waste and residue, to make electricity and fuel. DOE and USDA have programs available, and Congress, through the [Energy Policy Act of 2005] and forthcoming in the [USDA's 2007] Farm Bill, will increase the funding for those programs because a private company is reluctant to take the [financial] risk of meeting our goal, which is to guarantee in producing electricity and ethanol.

What sort of timeline are we looking at—if all the steps fall into place?
We could break ground, optimisti-

cally, in January. There are quite a few people standing by with their fingers crossed because they want to do the same thing.

What's been the feedback from Richmond?

I am assuming this is what Richmond wants. They talk about [how] we need to use more renewable resources and be less dependent upon fossil fuels and do something about global warming and try to encourage and promote without any funding or financial assistance. Biofuels and bioenergy. Yeah, that's good rhetoric. But in terms of financial assistance, no. In terms of technical assistance, we haven't really reached out to them.

The [Virginia] Department of Environmental Quality has been extremely helpful. We had to know what will be the environmental impact regulations on air and waste with this type of technology, this type of plant. DEQ is very favorable to this project, and I would hope Richmond is, too. Hopefully, they understand that this kind of approach to reducing fossil fuels and combating global warming could have a significant impact.

When did you get involved with this biomass plant concept?

About a year ago. I was looking at creating our own municipal power authority so we wouldn't be beholden to Dominion. I started researching various types of biomass and renewables. The focus has been taking the agriculture residues—the crop residue like the corn stover or the soybean stubble, that great cellulose—and go make ethanol out of that. I came across this renewable energy and really got excited by it. The focus has been large-scale projects where you can get a nice bang for your buck like hydro and nuclear, geothermal, and the biggest one, of course, is liquefied coal to produce a cleaner gas. If we can decentralize energy production in communities like Warrenton, then we are much more secure. That's why the concept is local energy independence.

Is this plant part of your overall Green Initiative?

I launched the Green Initiative with a goal to make Warrenton the greenest of all communities. A lot of communities are trying to go green. They're making a valiant effort. But I wanted to go beyond what they were doing. I want to be more comprehensive. In order to do that, try to get to 100 percent of your energy and fuel coming from renewable resources. The centerpiece of the Green Initiative is the biomass plant. Better use of your landfill. Better use of your waste. Reducing the carbon footprint of your community. And, of course, creating jobs. This concept—local, community-driven waste residue—I think significantly contributes to what everybody's goal is: Cut fossil fuels, cut global warming. Get your focus away from national to local.